

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1-38 (Cancelled)

39. (New) A method of grinding an inorganic particulate material in an aqueous suspension, said aqueous suspension comprising a sub-effective amount of at least one dispersant for the inorganic particulate material.

40. (New) A method according to claim 39, wherein the inorganic particulate material comprises calcium carbonate.

41. (New) A method according to claim 39, wherein the inorganic particulate material comprises hydrous kandite clays.

42. (New) A method according to claim 41, wherein the hydrous kandite clays comprise kaolins.

43. (New) A method according to claim 39, wherein the aqueous suspension comprises up to about 50% by weight of the inorganic particulate material.

44. (New) A method according to claim 39, wherein the aqueous suspension comprises up to about 0.25% by weight of the at least one dispersant, based on the dry weight of the inorganic particulate material.

45. (New) A method according to claim 44, wherein the aqueous suspension comprises up to about 0.15% by weight of the at least one dispersant, based on the dry weight of the inorganic particulate material.

46. (New) A method according to claim 45, wherein the aqueous suspension comprises up to about 0.1% by weight of the at least one dispersant, based on the dry

weight of the inorganic particulate material.

47. (New) A method according to claim 46, wherein the aqueous suspension comprises up to about 0.05% by weight of the at least one dispersant, based on the dry weight of the inorganic particulate material.

48. (New) A method according to claim 39, wherein the at least one dispersant is chosen from polyacrylates.

49. (New) A method according to claim 39, wherein the at least one dispersant is chosen from polymetaphosphates.

50. (New) A method according to claim 49, wherein the polymetaphosphate is chosen from sodium hexametaphosphate and tetrasodium metaphosphate.

51. (New) A method according to claim 39, wherein, after grinding, an additional amount of a dispersant is added to the aqueous suspension.

52. (New) A method according to claim 39, wherein, after grinding, an amount of water is removed from the aqueous suspension.

53. (New) A method according to claim 39, further comprising adjusting the solids level of the aqueous suspension after grinding to provide an aqueous suspension comprising the inorganic particulate material at a solids level above about 50% by weight, based on the total weight of the suspension.

54. (New) A method according to claim 39, wherein, after grinding, the inorganic particulate material has a steepness factor above about 35.

55. (New) A method according to claim 54, wherein, after grinding, the inorganic particulate material has a steepness factor above about 40.

56. (New) A method according to claim 55, wherein, after grinding, the

inorganic particulate material has a steepness factor above about 45.

57. (New) A method according to claim 39, wherein, after grinding, the inorganic particulate matter has an increased steepness.

58. (New) A method according to claim 39, further comprising dewatering the aqueous suspension after grinding, to achieve a solids content above about 50% by weight of the inorganic particulate material.

59. (New) A method according to claim 39, wherein the resultant ground inorganic particulate material is dried after treatment.

60. (New) A method according to claim 39, wherein the resultant ground inorganic particulate material is added to:

- a paper or paper pulp to provide a coating or filler therefore, and/or
- a composition which is subsequently processed to obtain a paper.

61. (New) A method according to claim 39, wherein the resultant ground inorganic particulate material is added to:

- a polymer or rubber, and/or
- to a composition which is subsequently processed to obtain a polymer or rubber.

62. (New) A method according to claim 61, wherein the polymer is a plastics material.

63. (New) A method according to claim 61, wherein the resultant polymer is formed into a film.

64. (New) A method according to claim 39, wherein the resultant ground inorganic particulate material is added to:

- a paint, and/or

-a composition which is subsequently processed to obtain a paint.

65. (New) A method according to claim 39, wherein the resultant ground inorganic particulate material is added to:

-a sealant or mastic, and/or

-a composition which is subsequently processed to obtain a sealant or mastic.

66. (New) A method according to claim 39, wherein the resultant ground inorganic particulate material is added to:

-a ceramic, and/or

a composition which is subsequently processed to obtain a ceramic.

67. (New) An aqueous suspension of a ground inorganic particulate material comprising a sub-effective amount of a dispersant for the inorganic particulate material.

68. (New) An aqueous suspension of a ground inorganic particulate material comprising a sub-effective amount of a dispersant for the at least one inorganic particulate material prepared by a method of grinding an inorganic particulate material in an aqueous suspension, wherein said aqueous suspension comprises a sub-effective amount of at least one dispersant for the inorganic particulate material.

69. (New) An aqueous suspension of a ground inorganic particulate material comprising a dispersant-effective amount of a dispersant for the inorganic particulate material, wherein said aqueous suspension is prepared by a method of grinding an inorganic particulate material in an aqueous suspension, said aqueous suspension comprising a sub-effective amount of at least one dispersant for the inorganic particulate material and adding, after grinding, a dispersant to the aqueous suspension.

70. (New) A dry ground inorganic particulate material comprising an amount

of a dispersant for the inorganic particulate material, the material being the dry residue of an aqueous suspension according to claim 67.

71. (New) A dry ground inorganic particulate material comprising an amount of a dispersant for the inorganic particulate material, the material being the dry residue of an aqueous suspension according to claim 68.

72. (New) A dry ground inorganic particulate material comprising an amount of a dispersant for the inorganic particulate material, the material being the dry residue of an aqueous suspension according to claim 69.

73. (New) A paper or paper pulp, when prepared by a method according to claim 60.

74. (New) A polymer or rubber, when prepared by a method according to claim 61.

75. (New) A paint, when prepared by a method according to claim 64

76. (New) A sealant or mastic, when prepared by a method according to claim 65.

77. (New) A ceramic, when prepared by a method according to claim 66.

78. (New) A process of inhibiting corrosion in a low solids aqueous suspension of inorganic particulate material comprising the addition of a sub-effective amount of at least one dispersant for said inorganic particulate material as a corrosion inhibitor in a low solids aqueous suspension.